IN THE CLAIMS:

1. (Cancelled)

2. (Previously Presented) The plasma display panel manufacturing method of Claim 28, wherein

in the sealant layer forming step, the sealant layer is formed with either plural protrusions or plural depressions in at least one part of the sealant layer formed at predetermined intervals on the at least one of the peripheral regions of the panels to provide the spaced open gaps.

3-27. (Cancelled)

28. (Previously Presented) In a plasma display panel manufacturing method for providing an improved plasma display panel with cells of phosphor layers including a blue phosphor layer with an improved chromaticity coordinate, the improvement comprising the steps of:

forming a sealant layer, about a peripheral region of main surfaces of a front panel and a back panel facing each other to provide cells of phosphor layers, the sealant layer is arranged in contact with both the periphery of the front panel and back panel to provide a plurality of spaced open gaps about the periphery to provide egress to an open space containing the cells between the facing front panel and back panel;

circulating a dry gas, wherein a partial pressure of steam included in the dry gas atmosphere is 130 Pa or lower, through the spaced open gaps to remove any absorbed gases from the manufacturing of the front panel and back panel;

initially heating the entire facing front panel and back panel to release the absorbed gases while circulating the dry gas through the spaced open gaps;

continuing the heating of the entire facing front panel and back panel at a temperature to soften the sealant layer sufficiently to gradually close the spaced open gaps while maintaining the circulation of the dry gas until the peripheral region is sealed wherein the chromaticity coordinate, *y*, in the CIE color specification of luminescent color of light emitted from only cells including the blue phosphor layer is 0.08 or lower; and

moving the facing front and back panels with the sealant open gaps through an oven while directing dry gas through nozzles toward side peripheral regions including the spaced gaps as the spaced gaps are gradually closed by an application of pressure.

29. (Cancelled)

30. (Previously Presented) The plasma display panel manufacturing method of Claim 28 wherein the height of the opening gap between the front and back panel is greater than 300 μm.

31. (Previously Presented) A plasma display panel manufacturing method comprising:

a phosphor layer forming step for forming phosphor layers on at least one of: a main surface of a front panel facing a back panel; and a main surface of the back panel facing the front panel;

a sealant layer forming step for forming a sealant layer having a softening point of 410°C or higher on at least one of: a peripheral region of the main surface of the front panel

facing the back panel; and a peripheral region of the main surface of the back panel facing the front panel; and

a sealing step for sealing, following the phosphor layer forming step and the sealant layer forming step, the front panel and the back panel that have been placed facing each other so that an inner space is surrounded by the sealant layer, by heating in a dry gas atmosphere the sealant layer to a temperature that is equal to or higher than a softening point of the sealant layer so as to soften the sealant layer,

wherein in the sealant layer forming step, the sealant layer is formed with either plural protrusions or plural depressions in at least one part of the sealant layer at certain intervals formed on the at least one of the peripheral regions of the panels, and a shape of the sealant layer is set so as to provide at least one gap between the peripheral regions of the front panel and the back panel when the front panel and the back panel are placed facing each other, the at least one gap allowing gas to pass between the inner space between the panels that is surrounded by the sealant layer and an outside of the panels.

32. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

in the sealant layer forming step, the sealant layer is formed with either plural protrusions or plural depressions in at least one part of the sealant layer at predetermined intervals on the at least one of the peripheral regions of the panels to provide the spaced open gaps.

33. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

a height of the protrusions or a depth of the depressions formed in the sealant layer in the sealant layer forming step is 300 μm or more.

34. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

the sealant layer is formed in the sealant layer forming step so that the part of the sealant layer in which protrusions are provided is narrower than other parts of the sealant layer.

35. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

the sealant layer is formed in the sealant layer forming step so that the part of the sealant layer in which depressions are provided is wider than other parts of the sealant layer.

36. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

in the sealant layer forming step, the sealant layer is formed around one of the peripheral regions of the facing main surfaces of the front panel and the back panel, and

the sealant layer is formed on at least one part of the other one of the peripheral regions of the facing main surfaces of the front panel and the back panel.

37. (Previously Presented) The plasma display panel manufacturing method of Claim 36, wherein

a thickness of the sealant layer formed on the other one of the peripheral regions of the facing main surfaces of the front panel and the back panel is 300 μm or more.

38. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

the sealant layer is formed in the sealant layer forming step so that a part of the sealant layer in which the at least one gap is provided is wider than other parts of the sealant layer in which the gap is not provided.

39. (Previously Presented) The plasma display panel manufacturing method of Claims 31, further comprising,

a partition forming step for forming partitions respectively along an outer edge and an inner edge of a region where the sealant layer is formed on the at least one of the peripheral regions of the facing main surfaces of the front panel and the back panel.

40. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

when the sealant layer is heated in the sealing step, the sealant layer is heated at a temperature no lower than 250°C but below the softening point of the sealant layer for at least 10 minutes, and then is heated to a temperature of the softening point or higher.

41. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

the sealant layer formed in the sealant layer forming step includes a glass with a low melting point.

42. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

the dry gas includes oxygen.

43. (Previously Presented) The plasma display panel manufacturing method of Claim 42, wherein

the dry gas is dry air.

44. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

a partial pressure of steam included in the dry gas atmosphere is 130Pa or lower.

45. (Previously Presented) The plasma display panel manufacturing method of Claim 31, wherein

the phosphor layers formed in the phosphor layer forming step include a blue phosphor layer composed of $BaMgAl_{10}O_{17}$: Eu.

46. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 31.

47. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 31 that includes a plurality of cells in each of which a blue phosphor layer is formed, wherein

a chromaticity coordinate y in the CIE color specification of luminescent color of light emitted from the cells in each of which the blue phosphor layer is formed when light is emitted from only the cells is 0.08 or lower.

48. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 31 that includes a plurality of cells in each of which a blue phosphor layer is formed, wherein

a peak wavelength of a spectrum of light emitted from the cells in each of which the blue phosphor layer is formed when light is emitted from only the cells is 455nm or shorter.

49. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 31 that includes a plurality of cells, wherein

a color temperature of luminescent color of light emitted from the cells when light is emitted from all the cells under the same power condition is 9000K or higher.

50. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 31, and that includes a plurality of cells in which phosphor layers including a blue phosphor layer and a green phosphor layer are formed, wherein

a ratio of a peak intensity of a spectrum of light emitted from the cells in each of which the blue phosphor layer is formed to a peak intensity of a spectrum of light emitted from the cells in each of which the green phosphor layer is formed, when light is emitted, under the same condition, from the cells in each of which one of the blue phosphor layer and the green phosphor layer is formed is 0.8 or higher.

51. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 44, and that includes a plurality of cells in each of which a blue phosphor layer is formed, wherein

a ratio of c-axis length to a-axis length of $BaMgAl_{10}O_{17}$: Eu is 4.0218 or smaller.

52. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 44, and that includes a plurality of cells in each of which a blue phosphor layer is formed, wherein

when $BaMgAl_{10}O_{17}$: Eu is analyzed with a thermal desorption analysis method, a peak value in the number of molecules contained in H_2O desorbed from $BaMgAl_{10}O_{17}$: Eu at 200°C or higher is 1×10^{16}/g or smaller.

53. (Previously Presented) An image display apparatus that includes a plasma display panel manufactured using the plasma display panel manufacturing method of Claim 31 and a driving circuit.

54. (Previously Presented) A plasma display panel sealing apparatus for sealing a front panel and a back panel that have been placed facing each other with a sealant layer between outer regions of the panels by heating the panels and the sealant layer, comprising,

a gas circulating unit for directing heating gas to sides of the panels so as to circulate the heating gas from the outer regions of the panels to an inner space between the panels.

55. (Previously Presented) A plasma display panel manufacturing method comprising:

a phosphor layer forming step for forming phosphor layers on at least one of: a main surface of a front panel facing a back panel; and a main surface of the back panel facing the front panel;

a sealant layer forming step for forming a sealant layer on at least one of: a peripheral region of the main surface of the front panel facing the back panel; and a peripheral region of the main surface of the back panel facing the front panel; and

a sealing step for sealing, following the phosphor layer forming step and the sealant layer forming step, the front panel and the back panel that have been placed facing each other so that an inner space is surrounded by the sealant layer, by heating in a dry gas atmosphere the sealant layer to a temperature that is equal to or higher than a softening point of the sealant layer so as to soften the sealant layer.

wherein a difference between a highest temperature at which the panels are heated in the sealing step and a softening point of the sealant layer is 40C° or less.

56. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

a softening point of the sealant layer is in a range of 380 to 390°C.

57. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

in the sealant layer forming step, the sealant layer is formed with either plural protrusions or plural depressions in at least one part of the sealant layer at predetermined intervals on the at least one of the peripheral regions of the panels to provide the spaced open gaps.

58. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

a height of the protrusions or a depth of the depressions formed in the sealant layer in the sealant layer forming step is 300 μm or more.

59. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

the sealant layer is formed in the sealant layer forming step so that the part of the sealant layer in which protrusions are provided is narrower than other parts of the sealant layer.

60. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

the sealant layer is formed in the sealant layer forming step so that the part of the sealant layer in which depressions are provided is wider than other parts of the sealant layer.

61. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

in the sealant layer forming step, the sealant layer is formed around one of the peripheral regions of the facing main surfaces of the front panel and the back panel, and

the sealant layer is formed on at least one part of the other one of the peripheral regions of the facing main surfaces of the front panel and the back panel.

62. (Previously Presented) The plasma display panel manufacturing method of Claim 61, wherein

a thickness of the sealant layer formed on the other one of the peripheral regions of the facing main surfaces of the front panel and the back panel is 300 μm or more.

63. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

the sealant layer is formed in the sealant layer forming step so that a part of the sealant layer in which the at least one gap is provided is wider than other parts of the sealant layer in which the gap is not provided.

64. (Previously Presented) The plasma display panel manufacturing method of Claim 55, further comprising,

a partition forming step for forming partitions respectively along an outer edge and an inner edge of a region where the sealant layer is formed on the at least one of the peripheral regions of the facing main surfaces of the front panel and the back panel.

65. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

when the sealant layer is heated in the sealing step, the sealant layer is heated at a temperature no lower than 250°C but below the softening point of the sealant layer for at least 10 minutes, and then is heated to a temperature of the softening point or higher.

66. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

the sealant layer formed in the sealant layer forming step includes a glass with a low melting point.

67. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

the dry gas includes oxygen.

68. (Previously Presented) The plasma display panel manufacturing method of Claim 67, wherein

the dry gas is dry air.

69. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

a partial pressure of steam included in the dry gas atmosphere is 130Pa or lower.

70. (Previously Presented) The plasma display panel manufacturing method of Claim 55, wherein

the phosphor layers formed in the phosphor layer forming step include a blue phosphor layer composed of $BaMgAl_{10}O_{17}$: Eu.

71. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 55.

72. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 55, and that includes a plurality of cells in each of which a blue phosphor layer is formed, wherein

a chromaticity coordinate y in the CIE color specification of luminescent color of light emitted from the cells in each of which the blue phosphor layer is formed when light is emitted from only the cells is 0.08 or lower.

73. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 55, and that includes a plurality of cells in each of which a blue phosphor layer is formed, wherein

a peak wavelength of a spectrum of light emitted from the cells in each of which the blue phosphor layer is formed when light is emitted from only the cells is 455nm or shorter.

74. (Previously Presented) A plasma display panel that is manufactured using the plasma display panel manufacturing method of Claim 55, and that includes a plurality of cells, wherein

a color temperature of luminescent color of light emitted from the cells when light is emitted from all the cells under the same power condition is 9000K or higher.

75. (Previously Presented) An image display apparatus that includes a plasma display panel manufactured using the plasma display panel manufacturing method of Claim 55, and a driving circuit.

76. (New) The plasma display panel manufacturing method of Claim 28 wherein the initial heating temperature is approximately 250°C and the continuing heating temperature is approximately 410°C or higher to soften the sealant layer.

77. (New) The plasma display panel manufacturing method of Claim 28 wherein the circulating of dry gas occurs within the oven and the nozzles direct the dry gas to provide an unrestricted flow of dry gas towards the spaced open gaps in a peripheral region of the front panel and back panel.

78. (New) The plasma display panel manufacturing method of Claim 77 wherein the ratio of an initial forming of the spaced gaps along the peripheral region to the remaining sealant layer contacting the front and back panels is 50%.